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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/684,484 | 10/15/2003 | Kouji Fujita | 031747 | 3494 |

23850 7590 08/15/2006

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| EXAMINER | |
|---|---|
| ELLIS, SUEZU Y | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2878 | |

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/684,484 | FUJITA, KOUJI | |
| | Examiner | Art Unit | |
| | Suezu Ellis | 2878 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,3 and 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5* is/are allowed.

6)☒ Claim(s) *1 and 3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/6/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## RESPONSE TO AMENDMENT

### *Information Disclosure Statement*

The information disclosure statement (IDS) submitted on January 6, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Saar et al. (US 6,236,035). Hereinafter, Saar et al. will be referred to as Saar.

With respect to claim 1, Saar discloses an occupant protection system (32) that senses the presence of an object, such as a vehicle occupant, located upon a vehicle seat (14). Saar discloses the system comprising a plurality of detection areas (I-XVI), where a plurality of light emitting areas (42A-42D) of a light emitting device (36) and a light receiving area of a light receiving device (50). Saar discloses in Fig. 4, a control unit (controller – 34) that controls the emitter (col. 5, lines 34-37). A driving current is inherent to the system. Since there are multiple emitters, each emitter would have a

driving current. The power supply (inherent to the system) would output a driving current for each emitter, especially when one beam from one emitter is emitted at a time (col. 10, lines 18-20). Therefore the power supply is considered to be outputting a plurality of driving currents. With respect to the inclusion of a reference value, the light detected when an object is "absent" (far enough from the instrument panel) is deemed equivalent to a reference value (Fig. 1). When an object is present, as illustrated in Figs. 5 and 6, the detected light that is reflected by an object has a greater intensity or magnitude than the light detected in the absence of an object. Thus, to determine the presence of an object, a comparison of the detected light in the "absence" (reference value) and in the presence of an object must be performed (col. 8, lines 55-65). Saar discloses the object sensor controller (34) provides a signal to the air bag controller (28) which controls the deployment of the air bag module (16) (col. 7, lines 50-55). With respect to the signal being analog or digital, it is inherent that the signal has to be either analog or digital signals.

With respect to claim 3, Saar discloses the emitters (40) can be synchronized so that one beam (42) is emitted at a time (predetermined pattern) in order to avoid beam confusion (col. 10, lines 18-20). Thus, the control signals must also change in a predetermined pattern since they control the emitters.

### *Allowable Subject Matter*

Claim 5 is allowed.

With respect to claim 5, prior art fails to teach or reasonably suggest the plurality of reference values being repeatedly changed in a predetermined pattern and are compared with the output level and the results of the comparison are outputted in sequence.

***Response to Arguments***

Applicant's arguments filed May 22, 2006 have been fully considered but they are not persuasive.

With respect to claim 1, applicant argues that Saar does no output a plurality of values of driving currents and that Saar outputs only one value for driving currents. Examiner respectfully disagrees. A driving current for an emitter is considered inherent to the system. Since Saar discloses multiple emitters, which can also be synchronized in a way such that one beam is a emitted at a time, each emitter would have its own driving current. Therefore, the power supply would provide a plurality of driving currents. Each driving current is deemed to be having a value, since a specific amount of driving current is applied to the emitter. Therefore, Saar is interpreted such that the power supply outputs a plurality of values of drive currents. From applicant's arguments, it appears that applicant is arguing that Saar fails to teach a power supply outputting a plurality of different values of driving current, however a plurality of different values is not recited in the claim. Thus the argument is considered moot and the rejection is maintained.

With respect to claim 3, applicant argues that due to its dependency on claim 1, claim 3 should be allowable. Since applicant's arguments regarding claim 1 are not considered persuasive, the rejection of claim 3 is maintained.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Telephone/Fax Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suezu Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800